AMENDMENTS TO THE CLAIMS

The listing of claims below replaces all prior versions, and listings, of claims:

1. (Cancelled)

2. (Currently Amended) A ~~system~~ serving GPRS support node (SGSN) for use in a mobile communications network having a plurality of cell sites, comprising:

an interface adapted to communicate with a base station system in a cell site over a Gb network; and

a controller adapted to transmit and receive data through the interface over the Gb network with the base station system according to a connectionless, packet-based protocol,

wherein the interface includes a connectionless, packet-based protocol layer to communicate packets with a connectionless, packet-based protocol layer in the base station system.

3. (Currently Amended) The ~~system~~ SGSN of claim 2, wherein the connectionless, packet-based protocol comprises an Internet Protocol.

4. – 7. (Cancelled)

8. (Previously Presented) The node of claim 46, wherein the packet-switched protocol comprises an Internet Protocol.

9. (Previously Presented) The node of claim 46, wherein the module is adapted to communicate data packets, each packet containing addresses identifying the node and the system controller.

10. (Original) The node of claim 9, wherein each packet contains Internet Protocol addresses.

11. - 18. (Cancelled)

19. (Currently Amended) A serving General Packet Radio Service (GPRS) support node for use in a mobile communications system having base station systems, comprising:

an interface to one or more networks coupled to the base station systems, the interface comprising a packet-switched element to manage communication over a network between the serving GPRS support node and at least one of the base station systems,

wherein the packet-switched element comprises an Internet Protocol element to communicate packets with an Internet Protocol element in the at least one base station system.

20. (Previously Presented) The serving General Packet Radio Service support node of claim 19, further comprising a User Datagram Protocol transport component to manage connections over the network.

21. (Previously Presented) The serving General Packet Radio Service support node of claim 19, further comprising a network services layer to transport data units containing signaling and bearer traffic over the network.

22. - 39. (Cancelled)

40. (Currently Amended) The ~~system~~ SGSN of claim 2, wherein the connectionless, packet-based protocol layer of the interface comprises a network layer, and the interface further comprises a transport layer to manage connections over the network.

41. (Currently Amended) The ~~system~~ SGSN of claim 40, wherein the controller comprises a network services layer to transport packets through the transport and network layers.

42. (Previously Presented) A system for use in a mobile communications network having a plurality of cell sites, comprising:

an interface adapted to communicate with a base station system in a cell site over a network; and

a controller adapted to transmit and receive data through the interface over the network with the base station system according to a packet-switched protocol,

wherein the interface comprises a network layer to manage communications of packets over the network, and a transport layer to manage connections over the network,

wherein the controller comprises a network services layer to transport packets through the transport and network layers,

wherein the network layer comprises an Internet Protocol layer to communicate over a Gb network with an Internet Protocol layer of the base station system.

43. (Previously Presented) The system of claim 42, wherein the transport layer comprises a User Datagram Protocol layer.

44. (Previously Presented) The system of claim 43, wherein the network services layer comprises a General Packet Radio Service network services layer.

45. (Cancelled)

46. (Currently Amended) A node for use in a mobile communications network having a system controller, the node comprising:

one or more radio transceivers adapted to communicate with mobile stations; and

a module coupled to the one or more radio transceivers and adapted to communicate through a Gb interface with the system controller according to a packet-switched protocol,

wherein the packet-switched protocol comprises a connectionless, packet-based protocol.

47. – 48. (Cancelled)

49. (Previously Presented) The serving General Packet Radio Service support node of claim 19, wherein the Internet Protocol element is adapted to communicate Internet Protocol packets to the Internet Protocol element in the at least one base station system over a Gb interface.

50. (Currently Amended) A node for use in a mobile communications network having a system controller, the node comprising:

one or more radio transceivers adapted to communicate with mobile stations;

a module coupled to the one or more radio transceivers and adapted to communicate with the system controller ~~according to a packet-switched protocol~~; and

an Internet Protocol layer to communicate over a Gb network with the system controller according to an Internet Protocol.

51. (Previously Presented) A method of communicating in a mobile communications system having a base station system, a system controller, and an interface between the base station system and the system controller, the method comprising:

transmitting and receiving data packets over the interface between the base station system and system controller according to a packet-switched protocol,

wherein transmitting and receiving data packets comprises an Internet Protocol layer in the system controller transmitting and receiving Internet Protocol packets over a Gb network with an Internet Protocol layer in the base station system.